

REMARKS

Claims 1-28 are pending in the application.

Claims 1-28 have been rejected.

Claims 1 and 15 have been amended as set forth herein.

Claims 8 and 22 are canceled herein without prejudice.

Claims 1-7, 9-21 and 23-28 remain pending in this application.

Reconsideration of the claims is respectfully requested.

I. CLAIM OBJECTIONS

Claim 1 was objected to because of an informality noted by the Examiner. In response, the Applicant has amended Claim 1. The Applicant respectfully requests the withdrawal of the objection to Claim 1.

II. CLAIM REJECTIONS -- 35 U.S.C. § 102

Claims 1-3, 6, 7, 15-17, 20 and 21 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,094,715 to *Wilkinson, et al.* (hereinafter "Wilkinson"). The Applicant respectfully traverses the rejection.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131, p. 2100-76 (8th ed., rev. 4, October 2005) (*citing In re Bond*, 910 F.2d

831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990)). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. *Id.* (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987)).

Amended independent Claim 1 recites an apparatus including a micro single instruction multiple data (SIMD) unit and a job buffer, where the job buffer dynamically bundles a plurality of jobs into a task, based on a control flow equivalence of the jobs, and allocates the task to the micro SIMD unit. In rejecting Claim 8, which recited a job buffer that dynamically allocated tasks to the micro SIMD unit by dynamically bundling jobs to be executed based on a control flow equivalence of the jobs, the Examiner acknowledged that Wilkinson fails to disclose such dynamic allocation by dynamic bundling based on control flow equivalence. However, the Examiner asserted that U.S. Patent No. 5,881,284 to *Kubo* (hereinafter “Kubo”) discloses such dynamic allocation by dynamic bundling. The Applicant respectfully submits that the Examiner appears to have mischaracterized the teaching of Kubo.

Kubo describes a device and method for scheduling a job so as to enhance a load balance between respective clusters in a clustered computer system. *See Kubo, col. 1, lines 6-8.* The computer system of Kubo includes a plurality of processor groups, each group sharing a main memory and referred to as a cluster. *See Kubo, col. 1, lines 14-15.* Jobs are assigned to clusters when a previous job completes or when a measurement of a utilization of the clusters completes. *See Kubo, col. 2, lines 1-8.* A job selector selects a job that is ‘suitable’ for a cluster from a job queue

and assigns the job to the cluster. *E.g., see Kubo, col. 3, lines 54-57.* Kubo contains no disclosure of what criteria are used to determine whether a job is suitable for a cluster. As such, Kubo does not disclose dynamically bundling a plurality of jobs into a task based on a control flow equivalence of the jobs.

For at least these reasons, amended independent Claim 1 is patentable over the cited references. Claims 2, 3, 6 and 7 depend from Claim 1 and include all the limitations of Claim 1. Therefore, Claims 2, 3, 6 and 7 also are patentable over the cited references. Amended independent Claim 15 recites limitations analogous to the novel and non-obvious limitations highlighted in the traversal of the rejection of Claim 1 and, therefore, also is patentable over the cited references. Claims 16, 17, 20 and 21 depend from Claim 15 and include all the limitations of Claim 15. Therefore, Claims 16, 17, 20 and 21 also are patentable over the cited references.

Accordingly, the Applicant respectfully requests that the Examiner withdraw the § 102 rejection with respect to Claims 1-3, 6, 7, 15-17, 20 and 21.

III. CLAIM REJECTIONS -- 35 U.S.C. § 103

Claims 4, 5, 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wilkinson in view of U.S. Patent No. 6,470,441 to *Pechanek, et al.* (hereinafter “Pechanek”). Claims 8-10, 13, 14, 22-24, 27 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wilkinson in view of U.S. Patent No. 5,881,284 to *Kubo* (hereinafter “Kubo”). Claims 11, 12, 25 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Wilkinson in view of

Kubo and in view of “Multi-thread VLIW processor architecture for HDTV decoding” by Hansoo Kim (hereinafter “Kim”). The Applicant respectfully traverses the rejections.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142, p. 2100-133 (8th ed. rev. 4, October 2005). Absent such a *prima facie* case, the applicant is under no obligation to produce evidence of nonobviousness. *Id.* To establish a *prima facie* case of obviousness, three basic criteria must be met: *Id.* First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *Id.* Second, there must be a reasonable expectation of success. *Id.* Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *Id.* The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure. *Id.*

Initially, the Applicant submits that the cancellation of Claims 8 and 22 renders moot their rejection under § 103.

As argued with regard to the § 102 rejection of Claim 1, Wilkinson and Kubo fail to disclose all the limitations of amended independent Claims 1 and 15. The Applicant respectfully submits that Pechanek and Kim do nothing to overcome the shortcomings of Wilkinson and Kubo. Claims 4, 5 and 9-14 depend from Claim 1 and Claims 18, 19 and 23-28 depend from Claim 15 and include all

the limitations of their respective base claims. As such, Claims 4, 5, 9-14, 18, 19 and 23-28 are patentable over the cited references.

Accordingly, the Applicant respectfully requests that the Examiner withdraw the § 103 rejections with respect to Claims 4, 5, 9-14, 18, 19 and 23-28.

CONCLUSION

As a result of the foregoing, the Applicant asserts that the remaining Claims in the Application are in condition for allowance, and respectfully requests an early allowance of such Claims.


If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@munckbutrus.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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Date: November 8, 2007



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